IN THE CLAIMS:

1. (Currently amended) A communications apparatus connectable to a SS7 network for processing voice-to-data signals, comprising:

at least one pair of signal transfer points (STP), each of which is connectable to at least one other STP within the public switched telephone network (PSTN) wherein SS7 signals are transferred therebetween;

a plurality of media gateways, each with its own point code; and

at least one switch that aggregates signaling control connectable to the at least one pair of STPs which in turn is connectable to one of the media gateways, wherein the switch controls the processing of the voice information received at the media gateway from the circuit-switched network of the PSTN in response to the SS7 signals received through the at least one pair of STPs, the voice information being switched from the circuit-switched network to a packet-switched network and back to a circuit-switched network.

2. (Previously presented) The apparatus of claim 1 wherein a first STP of the at least one pair of STPs is located at a first geographic location and a second STP of the at least one pair of STPs is located at a second geographic and a communications link is provided therebetween.

3. (Previously presented) The apparatus of claim 2 wherein a first switch is in communication with the first STP at the first location and a second switch is in communication with the second STP at the second location.

4. (Previously presented) The apparatus of claim 3 wherein the first and second switches each include a switching router which are connectable together over a packet transport network.

5. (Previously presented) The apparatus of claim 4 wherein the switching routers are configured to transfer encapsulated SS7 messages (MTP, ISUP, and TCAP) between each of the pair of STPs.

6. (Previously presented) The apparatus of claim 4 wherein each of the first and second switches includes a plurality of call/media computers configured to process the SS7 signals received by the at least one pair of STPs and to generate control signals which are transmittable over a data network to the media gateway which provides for the voice-to-data processing.

7. (Previously presented) The apparatus of claim 6 wherein the plurality of call/media computers are connectable to the at least one pair of STPs and the router through a communications network which comprises a logical A-link.

8. (Previously presented) The apparatus of claim 7 wherein the communications network comprises at least one of: a local area network (LAN) and a wide area network (WAN).

9. (Original) The apparatus of claim 6 wherein the plurality of call/media computers provide at least one of: class 4 and class 5 switching services.

10. (Previously presented) The apparatus of claim 6 wherein the at least one pair of STPs is further configured to perform lower level SS7 protocol processing and encapsulate SS7 ISUP message for transfer over an IP network.

11-18 (Canceled)

19. (New) A communications apparatus connectable to a SS7 network for processing voice-to-data signals, comprising:

at least one pair of signal transfer points (STP), each of which is connectable to at least one other STP within the public switched telephone network (PSTN) wherein SS7 signals are

transferred therebetween;

a plurality of media gateways, each with its own point code; and

at least one switch that aggregates signaling control connectable to the at least one pair of STPs which in turn is connectable to one of the media gateways, wherein the switch controls the processing of the voice information received at the media gateway from the PSTN in response to the SS7 signals received through the at least one pair of STPs, for transmission of a telephone call originating in an SSP and terminating in an SSP.

20. (New) A communications apparatus connectable to a SS7 network for processing voice-to-data signals, comprising:

at least one pair of signal transfer points (STP), each of which is connectable to at least one other STP within the public switched telephone network (PSTN) wherein SS7 signals are transferred therebetween;

a plurality of media gateways, each with its own point code; and

at least one switch that aggregates signaling control connectable to the at least one pair of STPs which in turn is connectable to one of the media gateways, wherein the switch controls the processing of the voice information received at the media gateway from the circuit-switched network of the PSTN in response to the SS7 signals received through the at least one pair of STPs, for transmission of a telephone call originating in an SSP and terminating in an SSP, the voice information being switched from the circuit-switched network to a packet-switched network and back to a circuit-switched network.